An Amendment to the Water Quality Control Plan for the Colorado River Basin Region To Establish the Total Maximum Daily Load for Sedimentation/Siltation for Imperial Valley Drains

AMENDMENT

(Proposed changes are in reference to the Basin Plan as amended through 2002. Proposed additions are denoted by <u>underlined text</u>, proposed deletions are denoted by <u>strikethrough</u> text)

Total Maximum Daily Load for Sedimentation/Siltation for Imperial Valley Drains

To TABLE OF CONTENTS, add the following to "CHAPTER 4 – IMPLEMENTATION", Subsection "V. ACTIONS FOR TOTAL MAXIMUM DAILY LOADS" and renumber pages accordingly:

- C. New River Sedimentation/Siltation TMDL
- D. Imperial Valley Drains Sedimentation/Siltation TMDL

To TABLE OF CONTENTS, add the following to "CHAPTER 4 – IMPLEMENTATION" and renumber pages accordingly:

VII. CONDITIONAL PROHIBITIONS

To TABLE OF CONTENTS, add the following to "CHAPTER 6 – SURVEILLANCE, MONITORING AND WATER QUALITY ASSESSMENT"; II. REGIONAL BOARD MONITORING; and renumber pages accordingly:

F. Total Maximum Daily Loads

To "CHAPTER 2 – BENEFICIAL USES", Section "IV. SOURCES OF DRINKING WATER POLICY", Subsection "A. SURFACE AND GROUND WATERS WHERE:", edit the following:

2. There is contamination, either by natural processes or by human activity (unrelated to a specific pollution incident), that cannot reasonably be treated for domestic use using either Best Management Practices or best economically achievable treatment practices, or

To "CHAPTER 3 – WATER QUALITY OBJECTIVES", Section "IV. GROUND WATER OBJECTIVES", edit the following:

Ideally the Regional Board's goal is to maintain the existing water quality of all nondegraded ground water basins. However, from a practical standpoint it must be noted that in most cases ground water that is pumped generally returns to the basin after use with an increase in mineral concentrations such as total dissolved solids (TDS), nitrate, etc., that are picked up by water during its use. Under these circumstances, the Regional Board's objective is to minimize the quantities of contaminants reaching any ground water basin. This could be achieved by establishing best management practices for major discharges to land. Until such time as the Regional Board can complete necessary investigations for the establishment of best management practices, the objective will be to maintain the existing water quality where feasible.

To "CHAPTER 4 – IMPLEMENTATION", Section "III. NONPOINT SOURCE CONTROLS", edit the following:

The Federal Clean Water Act, as amended in 1987, includes Section 319 titled "Nonpoint Source Management Programs". Section 319 requires the States to develop assessment reports and management programs describing the States' nonpoint source problems and setting forth a program to address the problems. The State Water Resources Control Board (State Board) adopted its "Nonpoint Source Management Plan" in November 1988. The Plan was updated in December 1999 with adoption of the "Plan For California's Nonpoint Source Pollution Control Program," (hereafter referred to as "State NPS Program"), including "Volume I: Nonpoint Source Program Strategy and Implementation Plan for 1998-2013 (PROSIP)" and "Volume II: California Management Measures for Polluted Runoff (CAMMPR)"

(adopted December 14, 1999, SWRCB Resolution No. 99-114). This Plan has an three-tiered approach to NPS water quality control whereby the following tiers are implemented as needed:

- Self-determined implementation of Best Management Practices (BMPs);
- 2. Regulatory-based encouragement of Best Management Practices; and

Sequential movement through the tiers (e.g. Tier 1 to Tier 2 to Tier 3) is not required of the Regional Board. Depending on the water quality impacts and severity of the NPS problem, the Regional Board may move directly to the full regulatory and complementary enforcement actions specified in Tier 3. It is the preference of the Regional Board to regulate nonpoint sources of pollution using the least stringent tier methods possible, while attaining water quality standards.

There is close cooperation between the State Board's Nonpoint Source Program and this Region's Nonpoint Source Program. Much of the funding for these programs comes from federal grants which are designed to assist in implementation of the federal Clean Water Act provisions on nonpoint source pollution control. Some of the important activities of these nonpoint source programs include development of water quality assessments, development and oversight of NPS pollution control demonstration projects, active cooperation with other affected state, local and federal agencies, identification, development and implementation of BMPs, program development activities, public participation, and educational outreach activities.

• Implementation of the three-tiered approach to NPS Regulation

To "CHAPTER 4 – IMPLEMENTATION", Section "III. NONPOINT SOURCE CONTROLS", Subsection "A. AGRICULTURE", edit the following:

Agricultural discharges, primarily irrigation return flows, constitute the largest volume of pollution entering surface waters in this Region. The eight agricultural drains/drain systems in this Region support significant beneficial uses as identified in Chapter 2 of this Plan. In an effort to protect and enhance these uses, the Regional Board adopted the "Agricultural Drainage Management (ADM) Report for the Colorado River Basin Region" in March 1992. This report established priorities for dealing with the drain systems based on a watershed approach. Drainage entities (e.g. water districts), including Imperial Irrigation District, Coachella Valley Water District, and Palo Verde Irrigation District, were identified in each of the four watersheds, and the Regional Board will work closely with these entities to implement agricultural pollution controls. In 1994, the Imperial Irrigation District (IID) adopted a Drain Water Quality Improvement Program, in which IID committed to monitor water quality, to develop and implement BMPs, and implement an education and outreach program to improve water quality in its drains and Alamo and New Rivers.

To "CHAPTER 4 – IMPLEMENTATION", Section "IV. SPECIFIC IMPLEMENTATION ACTIONS", Subsection "B. SALTON SEA", edit the following:

2. Pollution Control

Investigations by the Regional Board, the U.S. Geological Survey, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and others have identified pollutants from upstream sources which threaten the beneficial uses of the Sea. These pollutants include selenium, nutrients, pesticides, bacteria, and silt. Most of these pollutants are from agricultural runoff from farmlands in the Salton Sea Watershed. The largest contribution is from the Imperial Valley with smaller amounts coming from the Coachella and Mexicali Valleys. Controls on these pollutants are most effectively implemented at their source. The major control activity will be implementation of Best Management Practices (BMPs) on farmlands which will be conducted in accordance with the State's Nonpoint Source Program as discussed in Chapter 4. The Regional Board will also work with the USEPA, the U.S. Bureau of Reclamation, the Colorado River Basin Salinity Control Forum, and upstream states to identify sources of pollutants, especially Selenium, entering the Colorado River from locations upstream of California. Pending the availability of funding, the Regional Board will continue to monitor the water quality at the Salton Sea and its tributaries as described in Chapter 6.

To "CHAPTER 4 – IMPLEMENTATION", Section "V. TOTAL MAXIMUM DAILY LOADS", edit the following Subsequent Sections and renumber pages accordingly:

A. New River Pathogen Total Maximum Daily Load TMDL

1. TMDL ELEMENTS Table 4-1 A-1

B. Alamo River Sedimentation/Siltation TMDL

SUMMARY 1. TMDL ELEMENTS

Table 4-1 B-1

Footnotes for Table No. 4-1-B-1

Table 4.1A B-1A

Footnotes for Table No. 4.1A B-1A

Table 4-2 B-2

Footnotes for Table No. 4-2-B-2

C. New River Sedimentation/Siltation TMDL

1. TMDL ELEMENTS

Table 4-3 C-1

Table 4.3A C-1A

Footnotes for Table No. 4.3A-C-1A

Add the following new Subsequent Section and renumber accordingly:

- D. Imperial Valley Drains Sedimentation/Siltation TMDL
- 1. TMDL ELEMENTS

Table D-1: Imperial Valley Drains Sedimentation/Siltation TMDL Elements

<u>ELEMENT</u>	
Problem Statement (impaired water quality standard)	Excess delivery of sediment to Imperial Valley drains has resulted in degraded conditions that impairs designated beneficial uses: warm freshwater habitat; wildlife habitat; preservation of threatened, rare, or endangered species; water contact and non-contact water recreation; and freshwater replenishment. As the drains discharge into the Salton Sea, sediment also threatens the same beneficial uses of the Salton Sea. Sediment serves as a carrier for DDT, DDT metabolites, and other insoluble pesticides including toxaphene, which pose a threat to aquatic and avian communities and people feeding on fish from the drains. Suspended solids concentrations, sediment loads, and turbidity levels are in violation of water quality objectives. These current concentrations, loads, and levels also are forming objectionable bottom deposits, which are adversely affecting the beneficial uses of Imperial Valley Drains.

(This table is continued on the following page.)

Table D-1: Imperial Valley Drains Sedimentation/Siltation TMDL Elements (continued)

ELEMENT	CURRENT CONDITIONS	
Numeric Target	200 mg/L Total Suspended Solids (annual average) ¹	
	Source	tons/year
	Agricultural Tailwater	<u>25,789.6</u>
Source Analysis	Natural Sources (In-Stream Erosion & Wind Deposition)	616. <u>5</u>
	Storm Event Runoff from Farm Land	<u>50.5</u>
	<u>Total</u>	<u> 26,456.6</u>

ELEMENT	LOAD ALLOCATIONS
Margin of Safety	616.5 tons/year (corresponds to 10 mg/L)
Seasonal Variations and Critical Conditions	Seasonal differences exist regarding local water flow, but not local climate. Sediment becomes suspended in tailwater regardless of the season. However, more flow at certain times of year means that more sediment becomes suspended in drains at certain times of year. To address this seasonal variation, the numeric target is expressed in terms of an annual average. If data for certain months exceeds the load allocation, this may be tempered by low data readings in other months. Therefore, variability is accounted for and addressed by use of an annual average.
Loading Capacity (Total Assimilative Capacity)	12,330 tons/year (corresponds to 200 mg/L)

(This table is continued on the following page.)

¹ The numeric target is a goal that translates current sediment/silt-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

Table D-1: Imperial Valley Drains Sedimentation/Siltation TMDL Elements (continued)

	D-1: Imperial Valley Drains Sedimentation/Siltation IMDL E	iements (conti	<u>iiueuj</u>
ELEMENT			
Load	Natural sources of sediment to Imperial Valley Drains, including in-stream erosion and wind deposition, are allocated 616.5 tons/year. Waste discharges from nonpoint sources into Imperial Valley Drains shall not exceed load allocations specified below:		
Allocations and Wasteload Allocations	<u>Drain Sources</u>	# of IID Drains Included in Segment	Sediment Load Allocation (tons/year) ¹
	Niland 2	<u>1</u>	<u>300.3</u>
	<u>P</u>	<u>1</u>	638.3
	Pumice, including 5 Vail drains (Vail 4A, Vail 4, Vail 3A, Vail 3, and Vail 2A) that drain into it	<u>6</u>	<u>9,825.3</u>
	Future Growth	<u>None</u>	<u>332.9</u>
	Total Load Allocation for drains @ TSS = 180 mg/L		<u>11,097</u>
	Other Sources		
	Natural Sources	<u>Not</u> applicable	<u>616.5</u>
	Margin of Safety	<u>Not</u> applicable	<u>616.5</u>
	Total Load Allocation for other sources @ TSS = 20 mg/L	Not applicable	<u>1,233</u>
	Waste Load Allocations:		
	The discharge from point sources (NPDES permits) shall not exceed the total suspended solids limits specified under 40 CFR 122 et seq., and the corresponding mass loading rates.		

2. IMPLEMENTATION SCHEDULE

TMDL attainment shall be in accordance with the schedule contained in Table D-2, below:

Table D-2: Interim Numeric Targets for Attainment of the TMDL

Footnotes for Table No. D-1:

The sediment load allocation for any particular drain is distributed proportionately amongst the agricultural drains in the project area, based on the relative flow contribution of each drain to the total flow contribution of all drains in the project area. The sediment load allocation will be reviewed by the Regional Board's Executive Officer every three years following TMDL implementation.

<u>Phase</u>	Time Period ¹	Estimated Percent Load Reduction ²	Interim Target (mg/L) ³
Phase 1	2004 (Year 1)	20%	334
Phase 2	2005 through 2007 (Years 2 – 4)	25%	251
Phase 3	2008 through 2010 (Years 5 – 7)	15%	213
Phase 4	2011 through 2013 (Years 8 – 10)	6%	200

Footnotes for Table No. D-2:

- Year 1 refers to the effective date to start TMDL implementation, which shall be six months from when Office of Administrative Law (OAL) approves the TMDL. For example, if OAL approves the TMDL on May 15, 2004, Year 1 is May 15, 2004, which makes Year 3 May 15, 2006, which makes Year 4 May 15, 2007, and so on.
- Percent reductions indicate the reduction required in total suspended sediment load from the average concentration of Imperial Valley Drains at the beginning of each phase, beginning with the current (2002) average concentration of 418 mg/L.
 - a. The interim numeric target is a goal that translates current sediment/silt-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

Edit Section "1.1 DESIGNATED MANAGEMENT ACTIONS":

Consistent with the State NPS Program, sediment pollution shall be controlled by the Regional Board using a three tier approach and controlled by responsible parties through implementation of Best Management Practices (BMPs).

• Farmers/growers Farm landowners, renters/lessees, and operators/growers discharging waste into Imperial Valley Drains, New River, and Alamo River in a manner that causes or could cause violation of load allocations and/or exceedance of the Sediment/Silt numeric target;

Edit Subsequent Title and Section "1.1.1 Farmers/growers Water Quality Management Plans of Farm Landowners, Renters/Lessees, and/or Operators/Growers":

The farmers/growers farm landowners, renters/lessees, and/or operators/growers shall submit self-determined sediment control programs to the Regional Board by:

Table 4-4 Table C-4 Date that Corresponds to 15 months following the date of USEPA TMDL Approval Sediment Control Program Due Dates

TMDL	Date (15 months after USEPA Approval)
Imperial Valley Drains	6 months after Office of Administrative Law (OAL) approval
Alamo River	September 28, 2003
New River	September 28, 2003

A sediment control program may be submitted by an individual farmer/grower farm landowner, renter/lessee, or operator/grower (hereafter "Individual Program") or by a group of farmers/growers farm landowners, renters/lessees, and/or operators/growers (hereafter "Group Program"). In either case, the program shall, at a minimum, address the following components:

1. Name of farm landowner, business address, mailing address, and phone number

Edit Subsequent Section "1.1.2 The Imperial Irrigation District" and change to: Table 4-5 Table C-5 Date that Corresponds to 15 months following the date of USEPA TMDL Approval DWQIP Due Dates

Ву

Table 4-5 Date that	Date (15 months after USEPA
Corresponds so 15 months	Approval)
following the date of USEPA	
TMDL Approval* TMDL	
Imperial Valley Drains	6 months after OAL approval
Alamo River	September 28, 2003
New River	September 28, 2003

the Imperial Irrigation District shall submit to the Regional Board a revised Drain Water Quality Improvement Plan (DWQIP) with a proposed program to control and monitor water quality impacts caused by drain maintenance operations within the Imperial Valley Drains, Alamo River Watershed, and New River Watershed and dredging operations in the Imperial Valley Drains, Alamo River, and New Rivers.

a. Drain and River Deltas Maintenance

Reduction in drain cleaning and dredging activities to the practical extent allowed by the implementation of on- and off-field sediment control BMPs by the farmers/growers_farm landowners, renters/lessees, and/or operators/growers; and the BMP effectiveness in reducing silt built up in the drains, and the Imperial Valley Drains, New and Alamo River Deltas, to avoid impacts on sensitive resources.

b. Drain Water Quality Monitoring Plan

The revised DWQIP shall consist of a proposed program to monitor:

- Water quality impacts caused by dredging operations in the drains and to monitor the effects that
 dredging operations in the <u>Imperial Valley Drains</u>, New and Alamo River Deltas, have on the
 rivers' water quality standards of the drains and rivers;
- Representative samples from the water column of all major drains and a representative number
 of the small drains tributary to the Imperial Valley Drains, and New and Alamo Rivers, for
 analyses of flow, TSS, Turbidity, and nutrients. Samples collected from the last drain weir before
 the drain outfall to the rivers shall be considered representative of the water column;
- A representative number of drains at a location sufficiently upstream of the outfalls to the rivers so
 as to provide an idea of how much silt is being taking taken care of by field BMPs;

c. Information on Agricultural Dischargers

No later than

Table 4-6 <u>C-6</u> Date that Corresponds to 16 months following the date of USEPA TMDL Approval IID Submission of Data on Agricultural Dischargers

TMDL	Date (16 months after USEPA
	Approval
Imperial Valley Drains	6 months after OAL approval
Alamo River	October 28, 2003
New River	October 28, 2003

After Subsequent Section "1.1.3. United States Environmental Protection Agency (USEPA) and U.S. Section of the International Boundary and Water Commission (<u>USIBWC</u>)", add the following sections:

1.1.4. Tier 1 – Approved Self-Determined TMDL Watershed Programs

Individual and Group Sediment Control Programs are required pursuant to CWC §13267. These programs are necessary in order to achieve compliance with this TMDL and applicable water quality objectives, and to monitor /assess effectiveness of MPs. The evidence for requiring farm landowners,

<u>renters/lessees</u>, and/or operators/growers to provide sediment control programs is set forth in the TMDL Staff Report, contained in Section A of the Implementation Plan and elsewhere in the Staff Report.

1.1.5. Drain Water Quality Improvement Plan (DWQIP) and Quality Assurance Project Plan (QAPP)
The DWQIP and QAPP are required pursuant to CWC §13225 and 13267. These are necessary in order to achieve compliance with this TMDL and the applicable water quality objectives and to monitor /assess effectiveness of MPs in a cost-effective manner. IID is required to provide this information because it operates and maintains the subject drains and because it is the only entity with access to some of the information required in the DWQIP.

Edit Subsequent Title and Section "1.2 RECOMMENDED MANAGEMENT ACTIONS <u>AND DRAINAGE MANAGEMENT</u> FOR <u>FARMERS/GROWERS AND DRAINAGE MANAGEMENTFARM</u> LANDOWNERS, RENTERS/LESSEES, AND OPERATORS/GROWERS":

Implementation of BMPs should normally include: (1) consideration of specific site conditions; (2) monitoring to assure that practices are properly applied and are effective; (3) improvement of a BMP or implementation of additional BMPs or other management practices when needed to resolve a deficiency and; (4) mitigation of a problem where the practices are not effective. The practices listed herein are a compilation of BMPs recommended by the Technical Advisory Committee for the Silt TMDLs for the Imperial Valley Drains, Alamo and New Rivers (Silt TAC), the Natural Resources Conservation Services Field Office Technical Guide (NRCS FOTG), the IID, and the University of California Cooperative Extension (Holtville Field Station). Inclusion of practices herein is not meant to imply or establish a prescriptive list of 'one size fits all' preferred practices for the drainage basins tributary to the Imperial Valley Drains, Salton Sea, and Alamo and New Rivers.

Edit Subsequent Section Title "1.2.3 ESTIMATED COST OF IMPLEMENTATION AND SOURCES OF FINANCING FOR THE NEW AND ALAMO RIVERS" to:

"1.2.3 ESTIMATED COST OF IMPLEMENTATION AND SOURCES OF FINANCING FOR THE IMPERIAL VALLEY DRAINS, AND THE NEW AND ALAMO RIVERS"

The estimated total cost or of implementing BMPs range from \$5.00 just over \$2.00 to \$52.50 per acre per year, which is generally estimated to be less than or about 2% of production cost.

Edit Subsequent Section "1.3.1 IMPERIAL COUNTY FARM BUREAU VOLUNTARY WATERSHED PROGRAM":

a. ICFB WATERSHED PROGRAM PLAN

The Imperial County Farm Bureau should:

Bv:

Table 4-8 C-8 Date that Corresponds to 13 months following the date of USEPA TMDL Approval Letter Issue Dates

TMDL	Date (13 months after USEPA Approval
Imperial Valley Drains	3 months after OAL approval
Alamo River	July 28, 2003
New River	July 28, 2003

issue letters to all potential program participants within the <u>Imperial Valley Drains</u>, Alamo River, and <u>New River</u> watersheds that describes the ICFB Voluntary Watershed Program.

By

Table 4-9 C-9 Date that Corresponds to 15 months following the date of USEPA TMDL Approval List of Program Participants Dates

TMDL	Date (15 months after USEPA Approval
Imperial Valley Drains	5 months after OAL approval
Alamo River	September 28, 2003
New River	September 28, 2003

provide the Regional Board with a list of program participants, organized by subwatershed ("drainshed").

By:

Table 4-10 C-10 Date that Corresponds to 15 months following the date of USEPA TMDL Approval ICFB Watershed Program Plan Dates

The production of the contract		
TMDL	Date (15 months after USEPA	
	Approval	
Imperial Valley Drains	6 months after OAL approval	
Alamo River	September 28, 2003	
New River	September 28, 2003	

submit the ICFB Watershed Program Plan to the Regional Board. The Plan should (1) identify measurable environmental and programmatic goals; (2) describe aggressive, reasonable milestones and timelines for the development and implementation of TMDL outreach plans; (3) describe aggressive, reasonable milestones and timelines for the development of sub-watershed ("drainshed") plans; (4) describe a commitment to develop and implement a tracking and reporting program.

b. ICFB TRACKING AND REPORTING PROCEDURES

The Imperial County Farm Bureau should also:

By

Table 4-11 C-11 Date that Corresponds to 16 months following the date of USEPA TMDL Approval Tracking Implementation Plan Dates

TMDL	Date (16 months after USEPA Approval
Imperial Valley Drains	7 months after OAL approval
Alamo River	October 28, 2003
New River	October 28, 2003

submit a plan describing the process and procedures for tracking and reporting implementation of BMPs (and other proven management practices) and BMP performance to the Regional Board's Executive Officer.

After Section "VI. ACTIONS OF OTHER AUTHORITIES", add the following new Subsequent Section and renumber pages accordingly:

VII. CONDITIONAL PROHIBITIONS CHECK TO MAKE SURE THAT LATEST INFO IS BELOW

A. Imperial Valley Sedimentation/Siltation

A conditional prohibition of sediment/silt discharge is hereby established for Alamo River, New River, Imperial Valley Drains, and their tributaries in Imperial Valley. Specifically, beginning three months after OAL approval of the Imperial Valley Drains Sedimentation/Siltation TMDL, the direct or indirect discharge of sediment to the Alamo River, New River, Imperial Valley Drains, or their tributaries is prohibited, unless:

1. The Discharger is:

- a. In compliance with applicable Sedimentation/Siltation TMDL(s), including implementation provisions (e.g., Discharger is in good standing with the ICFB Watershed Program or has a Drain Water Quality Monitoring Plan (DWQMP) approved by the Executive Officer); or
- b. Has a monitoring and surveillance program approved by the Executive Officer that demonstrates that discharges of sediment/silt into the aforementioned waters do not violate or contribute to a violation of the TMDL(s), the anti-degradation policy (State Board Resolution No. 68-16), or water quality objectives; or
- c. Is covered by Waste Discharge Requirements (WDRs) or a Waiver of WDRs that applies to the discharge.

TMDL compliance groups have formed to address issues regarding wastewater discharge from irrigated lands to waters of the state. Individual Dischargers are not required by the Regional Board to join in TMDL compliance groups. Individual Dischargers who choose not to participate in TMDL

compliance groups must file a Report of Waste Discharge for general or individual Waste Discharge Requirements. Compliance with the conditional prohibition will be determined with respect to each individual Discharger, whether or not the Discharger is a member of a compliance group. The intent of this conditional prohibition is to control to the degree practicable sediment/silt discharges from irrigated lands in amounts that violate or contribute to a violation of state water quality standards.

To Chapter 6-SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT; II. REGIONAL BOARD MONITORING; Add Subsequent Section and renumber pages accordingly:

F. Total Maximum Daily Loads

Compliance Assurance and Enforcement

The Executive Officer shall use, as the circumstances of the case may warrant, any combination of the following actions to ensure that the water pollution threats identified in TMDLs are promptly and effectively corrected:

- Implementation and enforcement of Section 13225, 13267, and 13268 of the California Water Code to ensure that all responsible parties submit in a prompt and complete manner, the Water Quality Management Plan defined in Chapter 4, Section V(B)(1.1.1).
- Require submission of reports of waste discharge pursuant to CWC §13260.
- Adoption of waste discharge requirements, pursuant to Section 13263 of the California Water Code, as appropriate (i.e., for any responsible party who fails to implement voluntary or regulatory-encouraged sediment controls).
- <u>Adoption of enforcement orders pursuant to Section 13304 of the California Water Code against any responsible party who violates Regional Board waste discharge requirements and/or fails to implement voluntary or regulatory-encouraged sediment control measures to prevent and mitigate sediment pollution or threatened pollution of surface waters.</u>
- Adoption of enforcement orders pursuant to Section 13301 of the California Water Code against those who violate Regional Board waste discharge requirements and/or prohibitions.
- Issuance of Administrative Civil Liability Complaints, pursuant to Section 13261, 13264, or 13268 of the California Water Code, against any responsible party who fails to comply with Regional Board orders, prohibitions, and requests.
- Adoption of referrals of recalcitrant violators of Regional Board orders and prohibitions to the District Attorney or Attorney General for criminal prosecution or civil enforcement.

1. PATHOGEN/BACTERIAL INDICATORS

A. New River

1.A.1. Additional Compliance Assurance and Enforcement

Implement and enforce Section 13267 of the California Water Code to ensure that all dischargers subject to Regional Water Quality Control Board, Colorado River Basin Region, Order No. 01-800, NPDES No. CA0017001, General National Pollutant Discharge Elimination System Permit and General Waste Discharge Requirements for Confined Animal feeding Operations (Order No. 01-800), submit, in a prompt and complete manner, the Engineered Waste Management Plan required by Order No. 01-800.

1.A.2. Water Quality Monitoring

Monitoring activities are contingent upon adequate programmatic funding. Monitoring activities for the New River Pathogen TMDL will be conducted by the Regional Board pursuant to a Regional Board Quality Assurance Project Plan for the New River (QAPP-NR). The QAPP-NR shall be developed by Regional Board staff and be ready for implementation within 180 days following USEPA approval of the TMDL. The objectives of the monitoring program shall include collection of water quality data for:

- assessment of water quality standards attainment,
- verification of pollution source allocations,
- calibration or modification of selected models (if any),
- evaluation of point and nonpoint source control implementation and effectiveness,
- evaluation of in-stream water quality,

- evaluation of temporal and spatial trends in water quality, and
- modification of the TMDL as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the New River and major drain tributaries to the river. Monthly grab samples from the above-mentioned surface waters shall be collected and analyzed for the following parameters:

- Flow (to be obtained from IID or USGS)
- Dissolved Oxygen
- pH
- <u>Temperature</u>
- Fecal coliform organisms
- E. Coli
- Fecal streptococci
- Enterococci

Activities implemented by dischargers and responsible parties and surveillance conducted for the New River Pathogen TMDL will be tracked pursuant to a Regional Board implementation tracking plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of the TMDL. The objectives of Regional Board surveillance and implementation tracking are:

- Assess/track/account for practices already in place;
- Measure the attainment of Milestones;
- Determine compliance with NPDES permits, WLAs, and LAs; and
- Report progress toward implementation of NPS water quality control, in accordance with the SWRCB NPS Program Plan (PROSIP).

2. SEDIMENTATION/SILTATION

A. Imperial Valley

2.A.1 Additional Compliance Assurance and Enforcement

As provided in the State Board's Water Quality Enforcement Policy, prompt, consistent, predictable, and fair enforcement are necessary to deter and correct violations of water quality standards, violations of the California Water Code, and to ensure that responsible parties carry out their responsibilities for meeting TMDL allocations. This is particularly necessary to adequately deal with those responsible parties who fail to implement self-determined or regulatory-encouraged sediment control measures, which are the cornerstone of the State's NPS Program.

From the standpoint of measuring progress, any cropland discharge with a concentration of suspended solids, measuring more than 375 mg/L (or about 270 NTU for turbidity) and absent reasonable implementation of MPs would be considered unsatisfactory. Samples will be analyzed for volatile suspended solids at locations where organic loading represents a significant proportion of the total suspended solids or turbidity. The volatile suspended solids component will be subtracted. Further, in assessing the status of compliance with Load Allocations of any responsible party, the Regional Board shall consider, in addition to water quality results, the degree to which the responsible party has implemented, or is implementing, sediment control measures. In the absence of true progress, the Regional Board directs the Executive Officer to draft requirements that will fulfill sediment control measures. The numeric target is a goal that translates current sediment/silt-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

2.A.2. Monitoring and Tracking

Tracking TMDL and monitoring water quality progress, and modifying TMDLs and implementation plans as necessary to ensure attainment of water quality standards, are important to address uncertainty that may exist in aspects of TMDL development, oversee TMDL implementation to ensure that implementation is being carried out, and to ensure that the TMDL remains effective, given changes that may occur in the watershed after the TMDL is developed. (All monitoring activities are contingent on funding through fund-source specific work plans.)

2.A.2.1 Water Quality Monitoring and Assessment

Monitoring activities are contingent upon adequate programmatic funding. Regional Board staff will conduct monitoring activities for the Alamo River, New River, and Imperial Valley Drains Sedimentation/Siltation TMDLs pursuant to a Regional Board Quality Assurance Project Plan for the Alamo River (QAPP-AR), New River (QAPP-NR), and Imperial Valley Drains (QAPP-IV Sed) Sediment TMDLs. The QAPPs shall be developed by Regional Board staff. The QAPP-AR and QAPP-NR shall be ready for implementation within 180 days following USEPA approval of these TMDLs. The QAPP-IV Sed shall be ready for implementation by one month following OAL approval of this TMDL. The Regional Board's Executive Officer shall approve the QAPPs and monitoring plans after determining that they satisfy the objectives and requirements of this Section. The objectives of the monitoring program shall include collection of water quality data for:

- Assessment of water quality standards attainment.
- Verification of pollution source allocations,
- Calibration or modification of selected models (if any),
- Evaluation of point and nonpoint source control implementation and effectiveness,
- Evaluation of in-stream water quality,
- Evaluation of temporal and spatial trends in water quality, and
- Modification of the TMDLs as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the Alamo River, New River, Imperial Valley Drains, and major drain tributaries to the rivers and Salton Sea. The following parameters will be sampled and analyzed from the above-mentioned surface waters, contingent on funding. Data sources may be outside of the Regional Board. Frequency is in brackets.

- Flow (to be obtained from IID or USGS) [Quarterly]
- Field turbidity [Monthly]
- Laboratory turbidity (EPA Method No. 180.1) [Monthly]
- Total suspended solids (EPA Method No. 160.2) [Monthly]
- Total DDT and DDT metabolites (EPA Method No. 8081) [Quarterly]

The Regional Board will track activities implemented by dischargers and responsible parties and surveillance conducted for the Alamo River, New River, and Imperial Valley Drains Sedimentation/Siltation TMDLs pursuant to an implementation tracking plan (ITP). Regional Board staff will develop and implement the ITP within 180 days following USEPA approval of the Alamo River and New River TMDLs. Regional Board staff will develop and implement the ITP by one month following OAL approval of the Imperial Valley Drains TMDL. The Regional Board's Executive Officer shall approve the ITP after determining that the ITP satisfies the objectives and requirements of this Section. The objectives of Regional Board Surveillance and implementation tracking are:

- Assess/track/account for practices already in place;
- Measure the attainment of Milestones;
- Determine compliance with NPDES permits, WLAs, and LAs; and
- Report progress toward implementation of NPS water quality control, in accordance with the SWRCB NPS Program Plan (PROSIP).

2.A.2.2 TMDL Implementation Tracking

Implementation of sediment control activities shall be tracked by Regional Board staff and shall be reported to the Regional Board at least yearly.

2.A.2.3 TMDL Assessment and Reporting

On a yearly basis, Regional Board staff will prepare a report assessing compliance with the TMDL Goals and Milestones. In the report, staff will assess:

- Water quality improvement (in terms of total suspended sediments, total sediment loads, Total DDT, and DDT metabolites).

- Trends in MP implementation.
- MP effectiveness.
- Whether milestones were met on time or at all. If milestones were not met, provide a discussion of the reasons, and make recommendations.
- Level of compliance with measures and timelines agreed to in Program Plans and Drainshed Plans associated time schedules.
- Level of compliance with measures and timelines agreed to in Drainshed Plans.

2.A.2.4 Regular Review

The Regional Board shall hold public hearings at least every three years to review the level of MP implementation, effectiveness of MPs, and overall progress of sediment control practices. At these hearings, the following shall be considered:

- Monitoring results to date
- Progress toward attainment of milestones
- Changes or trends in implementation of MPs
- Modification/addition of management practices for the control of sediment discharges
- Revision of TMDL components and/or development of site-specific water quality objectives

Review of subcategories of water quality standards related to these TMDLs and/or attainability of the TMDLs also may be appropriate after the parties responsible for TMDL implementation submit appropriate documentation that sediment control practices (e.g., MPs) are being implemented on a widespread-basis in the watersheds, that the control practices are being properly implemented and maintained, and that additional controls would result in substantial and widespread economic and social impact. The Regional Board 303(d) listing of the sediment/silt impairment for the Alamo River, New River, Imperial Valley Drains and/or tributary drains shall also be re-evaluated.

To Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT;

- II. REGIONAL BOARD MONITORING; B. COMPLIANCE MONITORING: delete Subsequent Sections and renumber pages accordingly:
- 3. New River Pathogen TMDL
- 4. Alamo River Sedimentation/Siltation TMDL
- 5. New River Sedimentation/Siltation TMDL
- 5.1 Compliance Assurance and Enforcement

As provided in the State Board's Water Quality Enforcement Policy, prompt, consistent, predictable, and fair enforcement are necessary to deter and correct violations of water quality standards, violations of the California Water Code, and to ensure that responsible parties carry out their responsibilities for meeting the TMDL allocations. This is particularly necessary to adequately deal with those responsible parties who fail to implement self-determined or regulatory-encouraged sediment control measures, which are essentially the cornerstone of the State's NPS Program. To this end, the Regional Board may use use, as the circumstances of the case may warrant, any combination of the following:

- Implementation and enforcement of Section 13267 of the California Water Code to ensure that all responsible parties submit, in a prompt and complete manner, the Water Quality Management Plan defined in Chapter 4, Section V(B)(1.1.1).
- Consideration of adoption of waste discharge requirements, pursuant to Section 13263 of the California Water Code, as appropriate (i.e., for any responsible party who fails to implement voluntary or regulatory encouraged sediment controls).
- Consideration of adoption of an enforcement orders pursuant to Section 13304 of the California
 Water Code against any responsible party who violates Regional Board waste discharge requirements

and/or fails to implement voluntary or regulatory-encouraged sediment control measures to prevent and mitigate sediment pollution or threatened pollution of surface waters.

- Consideration of adoption of enforcement orders pursuant to Section 13301 of the California Water Code against those who violate Regional Board waste discharge requirements and/or prohibitions.
- Consideration of Administrative Civil Liability Complaints, as provided for by the California Water Code, against any responsible party who fails to comply with Regional Board orders, prohibitions, and requests.
- Consideration of adoption of referrals of recalcitrant violators of Regional Board orders and prohibitions to the District Attorney or Attorney General for criminal or civil prosecution, respectively.

From the standpoint of measuring progress, any cropland discharge with a concentration of suspended solids, measuring more than 375 mg/l (or about 270 NTU for turbidity) and absent reasonable implementation of BMPs would be considered unsatisfactory. Samples will be analyzed for volatile suspended solids at locations where organic loading represent a significant proportion of the total suspendedsolids or turbidity. The volatile suspended solids component will be subtracted. Further, in assessing the status of compliance with Load Allocations specified in Table No. 4-1 of any responsible party who is in either Tier I or Tier II, the Regional Board shall consider, in addition to water quality results, the degree to which the responsible party has implemented, or is implementing, sediment control measures. In the absence of true progress the Regional Board directs the Executive Officer to draft requirements that will fulfill the sediment control measures. The numeric target is a goal that translates current silt/sediment-related Basin Plan narrative objectives and shall not be used for enforcement purposes.

5.2. Monitoring and Tracking

Tracking TMDL and monitoring water quality progress, and modifying TMDLs and implementation plans as necessary to ensure attainment of water quality standards are important to address uncertainty that may exist in aspects of TMDL development, oversee TMDL implementation to ensure that implementation is being carried out, and to ensure that the TMDL remains effective, given changes that may occur in the watershed after the TMDL is developed. (All monitoring activities are contingent on funding through fund-source specific work plans.)

Water Quality Monitoring and Assessment

Alamo River

Regional Board water quality monitoring activities for the Alamo River Sedimentation/Siltation TMDL Monitoring and Tracking Program shall be conducted pursuant to a Quality Assurance Project Plan for the Alamo River (QAPP-AR). The QAPP AR shall: (1) include a sufficient number of sampling stations along the Alamo River to determine progress towards compliance with the TMDL and overall water quality improvement; (2) provide for monthly monitoring of flow, field turbidity, laboratory turbidity, total suspended solids in the river; and (3) provide for quarterly monitoring of DDT and DDT metabolites in the river's water column.

New River

Monitoring activities are contingent upon adequate programmatic funding. The Regional Board will conduct monitoring activities for the New River Sedimentation/Siltation TMDL pursuant to a Regional Board Quality Assurance Project Plan for the New River (QAPP-NR). The QAPP-NR shall be developed by Regional Board staff and be ready for implementation within 180 days following USEPA approval of this TMDL. The Regional Board's Executive Officer shall approve the QAPP-NR and monitoring plan after determining that the QAPP-NR and monitoring plan satisfy the objectives and requirements of this Section 5.2. The objectives of the monitoring program shall include collection of water quality data for:

- Assessment of water quality standards attainment,
- Verification of pollution source allocations,
- Calibration or modification of selected models (if any),
- Evaluation of point and nonpoint source control implementation and effectiveness,
- Evaluation of in-stream water quality,

- Evaluation of temporal and spatial trends in water quality, and
- Modification of the TMDL as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the New River and major drain tributaries to the river. Monthly grab samples from the above-mentioned surface waters shall be collected and analyzed for the following parameters:

- Flow (to be obtained from IID or USGS)
- Dissolved Oxygen
- pH
- Temperature
- Field turbidity
- Laboratory turbidity
- Total suspended solids
- Quarterly monitoring of DDT and DDT metabolites
- Fecal coliform organisms
- E. Coli
- Fecal streptococci
- Enterococci

The Regional Board will track activities implemented by dischargers and responsible parties and surveillance conducted for the New River Sedimentation/Siltation TMDL pursuant to an implementation tracking plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of this TMDL. The Regional Board's Executive Officer shall approve the ITP after determining that the ITP satisfies the objectives and requirements of this Section 5.2. The objectives of Regional Board Surveillance and implementation tracking are:

- Assess/track/account for practices already in place;
- Measure the attainment of Milestones;
- Determine compliance with NPDES permits, WLAs, and LAs; and
- Report progress toward implementation of NPS water quality control, in accordance with the SWRCB NPS Program Plan (PROSIP).

TMDL Implementation Tracking

Implementation Tracking Plan:

Implementation of sediment control activities shall be tracked by Regional Board staff and shall be reported to the Regional Board at least yearly.

Assessment and Reporting

On a yearly basis, the Regional Board staff will prepare a report assessing compliance with the TMDL Goals and Milestones. In the report, staff will assess the following:

Water quality improvement (in terms of total suspended sediments, total sediment loads, DDT and metabolites, total phosphate)

Trends in BMP implementation

BMP effectiveness/performance/ and costs

Whether milestones were met on time or at all. If milestones were not met, provide a discussion of the reasons, and a recommendation

Level of compliance with measures and timelines agreed to in Program Plans and associated time schedules.

Level of compliance with measures and timelines agreed to in Drainshed Plans.

Regular Review

The Regional Board shall hold public hearings at least every three years to review the level of implementation of BMPs, effectiveness of the BMPs, and overall progress of the sediment control practices. At these hearings, the following shall be considered:

- Monitoring results to date
- Progress toward attainment of milestones
- Changes or trends in implementation of BMPs
- Modification/addition of management practices for the control of sediment discharges
- Revision of TMDL components and/or development of site-specific water quality objectives

Review of subcategories of water quality standards related to this TMDL and/or attainability of the TMDL may also be appropriate after the parties responsible for TMDL implementation submit appropriate documentation that sediment control practices (e.g., BMPs) are being implemented on a widespread-basis in the Alamo River Subwatershed, that the control practices are being properly implemented and maintained, and that additional controls would result in substantial and widespread economic and social impact. The Regional Board 303(d) listing of the silt/sediment impairment for the Alamo River and tributary drains shall also be re-evaluated.

The first public hearing shall be scheduled by no later than three years after the date following USEPA TMDL approval of this Basin Plan amendment.

To Chapter 6- SURVEILLANCE, MONITORING, AND WATER QUALITY ASSESSMENT;

II. REGIONAL BOARD MONITORING; D. INTENSIVE SURVEYS: delete Subsequent Sections and renumber pages accordingly:

3. New River Pathogen TMDL

3.1 Compliance Assurance and Enforcement

The Executive Officer shall use, as the circumstances of the case may warrant, any combination of the following actions to ensure that the severe threat that current bacterial concentration in the New River pose to public health is promptly and effectively corrected:

- Implement and enforce Section 13267 of the California Water Code to ensure that all dischargers subject to Regional Water Quality Control Board, Colorado River Basin Region, Order No. 01-800, NPDES No. CA0017001, General National Pollutant Discharge Elimination System Permit and General Waste Discharge Requirements for Confined Animal feeding Operations (Order No. 01-800), submit, in a prompt and complete manner, the Engineered Waste Management Plan required by Order No. 01-800.
- Either issue or prepare for Regional Board consideration of adoption an enforcement order pursuant to Section 13304 of the California Water Code against any responsible party who violates Regional Board waste discharge requirements.
- Prepare for Regional Board consideration of adoption, an enforcement order pursuant to Section 13301 of the California Water Code against those who violate Board waste discharge requirements and the Pathogen TMDL.
- Issue an Administrative Civil Liability Complaint as provided for by the California Water Code against any responsible party who fails to comply with Board orders, prohibitions, and requests.
- Prepare for Regional Board consideration of adoption a referral of recalcitrant violators of Board orders and prohibitions to the District Attorney or Attorney General for criminal or civil prosecution, respectively.
- Prepare for Regional Board consideration of adoption an enforcement order pursuant to Section 13304 against the appropriate responsible parties if measures to prevent wastes from Mexico from causing or contributing to violations of the Pathogen TMDL are not implemented in a timely manner.

3.2 Water Quality Monitoring

Monitoring activities are contingent upon adequate programmatic funding. Monitoring activities for the New River Pathogen TMDL will be conducted by the Regional Board pursuant to a Regional Board Quality Assurance Project Plan for the New River (QAPP-NR). The QAPP-NR shall be developed by

Regional Board staff and be ready for implementation within 180 days following USEPA approval of this TMDL. The objectives of the monitoring program shall include collection of water quality data for:

- assessment of water quality standards attainment,
- · verification of pollution source allocations,
- calibration or modification of selected models (if any).
- evaluation of point and nonpoint source control implementation and effectiveness,
- evaluation of in-stream water quality,
- evaluation of temporal and spatial trends in water quality, and
- modification of the TMDL as necessary.

The monitoring program shall include a sufficient number of sampling locations and sampling points per location along the New River and major drain tributaries to the river. Monthly grab samples from the above-mentioned surface waters shall be collected and analyzed for the following parameters:

- Flow (to be obtained from IID or USGS)
- Dissolved Oxygen
- pH
- Temperature
- Fecal coliform organisms
- E. Coli
- Fecal streptococci
- Enterococci

Activities implemented by dischargers and responsible parties and surveillance conducted for the New River Pathogen TMDL will be tracked pursuant to a Regional Board implementation tracking plan (ITP). Regional Board staff will develop the ITP within 180 days following USEPA approval of this TMDL. The objectives of Regional Board surveillance and implementation tracking are:

- Assess/track/account for practices already in place;
- Measure the attainment of Milestones;
- Determine compliance with NPDES permits, WLAs, and LAs; and

Report progress toward implementation of NPS water quality control, in accordance with the SWRCB NPS Program Plan (PROSIP).